

## REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections contained in the Office Action of December 28, 2007 is respectfully requested.

In the outstanding Office Action, the Examiner again rejected all of the pending claims in view of the prior art. In particular, the Examiner rejected claims 18-23, 28, and 30 as being anticipated by the Saito reference (US Publication 2003/0041968); rejected claims 24 and 25 as being unpatentable over the Saito reference in view of the JP '523 reference (Japanese Publication 10-012523); and rejected claims 26 and 27 as being unpatentable over the Saito reference in view of the Kobayashi reference (USP 6,497,240) or the Mitsumori reference (USP 6,230,722). However, in view of the personal interview conducted with the Examiner on March 19, 2008, the claims (including independent claim 18) have now been amended as indicated above, and new dependent claim 31 has been added. Therefore, for the reasons discussed below, it is respectfully submitted that the amended and new claims are clearly patentable over the prior art of record.

As an initial matter, the Applicant's undersigned representative would like to express appreciation to the Examiner for his time and effort in conducting the personal interview in an effort to resolve the issues in this application.

During the interview, the Applicant's undersigned representative explained that the Saito reference does not teach a suction nozzle having a suction mouth arranged to face an upper surface of a substrate. In particular, the broken lines shown in Figure 2B of the Saito reference indicate that the suction mouth of the liquid discharge pipe 4 is located within the lower cantilever portion 2c of the etching unit 2. As clearly illustrated in this figure, the suction mouth faces the *bottom surface* of the substrate W. Therefore, the Applicants maintain that the Saito reference does not teach or even suggest this feature recited in independent claim 18.

Nonetheless, without acquiescing to the Examiner's interpretation of the Saito reference, the Applicants note that independent claim 18 has now been amended to further clarify the present invention. Firstly, independent claim 18 now recites that the processing apparatus comprises a supply unit communicating with the supply nozzle for supplying the processing liquid onto the substrate via the supply nozzle, and a suction unit communicating with the suction nozzle for sucking the processing liquid from the via the suction nozzle. Thus, independent claim 18 now recites structure to further clarify the "suction nozzle" and "supply nozzle" so as to distinguish those components from the prior art, including the Saito reference.

Furthermore, independent claim 18 now recites that the suction nozzle has a suction mouth configured to suck the processing liquid on the peripheral portion of the upper surface of the substrate *in an upward direction*. As clearly illustrated in Figure 2B of the Saito reference, the suction mouth of the liquid discharge pipe 4 is clearly arranged to suck the processing liquid in a *downward* direction (or, at best, a sideways or in radial direction). Thus, this feature also clearly further distinguishes the substrate processing apparatus of the present invention from the prior art, including the Saito reference.

As explained to the Examiner during the personal interview, an important aspect of the present invention is to apply the processing liquid to the substrate, remove the processing liquid from the substrate, and rotate the substrate in such a manner that the processing liquid remains in contact with the outer peripheral portion of the upper surface of the substrate for the greatest reasonable length of time. As a result, the amount of processing liquid needed to perform the processing of the substrate can be minimized, and the outer periphery of the substrate can be accurately and reliably processed by the processing liquid (see page 17, line 23 through page 18, line 12 of the original specification).

In order to achieve the above object, independent claim 18 has now been further amended to recite that the substrate processing apparatus further comprises a drive source for controlling a direction of rotation of the substrate holder so as to *maximize a distance traveled by the processing liquid* between being supplied onto the substrate by the supply nozzle and being sucked from the substrate by the suction nozzle during a single rotation of the substrate holder. This feature is clearly illustrated in Figures 2A and 2C of the present invention, which both illustrate that the distance traveled is maximized due to the counter-clockwise rotation of the substrate W. In other words, if the substrate were to be rotated in the clockwise direction, the distance traveled by the processing liquid between being supplied on to the substrate by the supply nozzle 16 and being sucked from the substrate by the suction nozzle 21 would be minimized due to the short distance between the supply nozzle 16 and the suction nozzle 21. It is submitted that the Saito reference also does not teach or even suggest this feature.

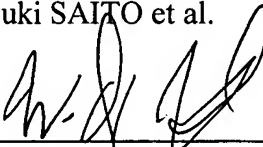
As noted above, the Saito reference does not teach or suggest any of the new features now recited in independent claim 18, particularly when considering these new features in combination with previously-recited features. Furthermore, the JP '523 reference, the Kobayashi reference, and the Mitsumori reference also do not teach or suggest these features. Consequently, it is

respectfully submitted that the prior art of record does not render obvious amended independent claim 18. Accordingly, it is respectfully submitted that amended independent claim 18 and the claims that depend therefrom are clearly patentable over the prior art of record.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. However, if the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact the Applicant's undersigned representative.

Respectfully submitted,

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